

FIG 13B Server

Sending Device

Receiving Device

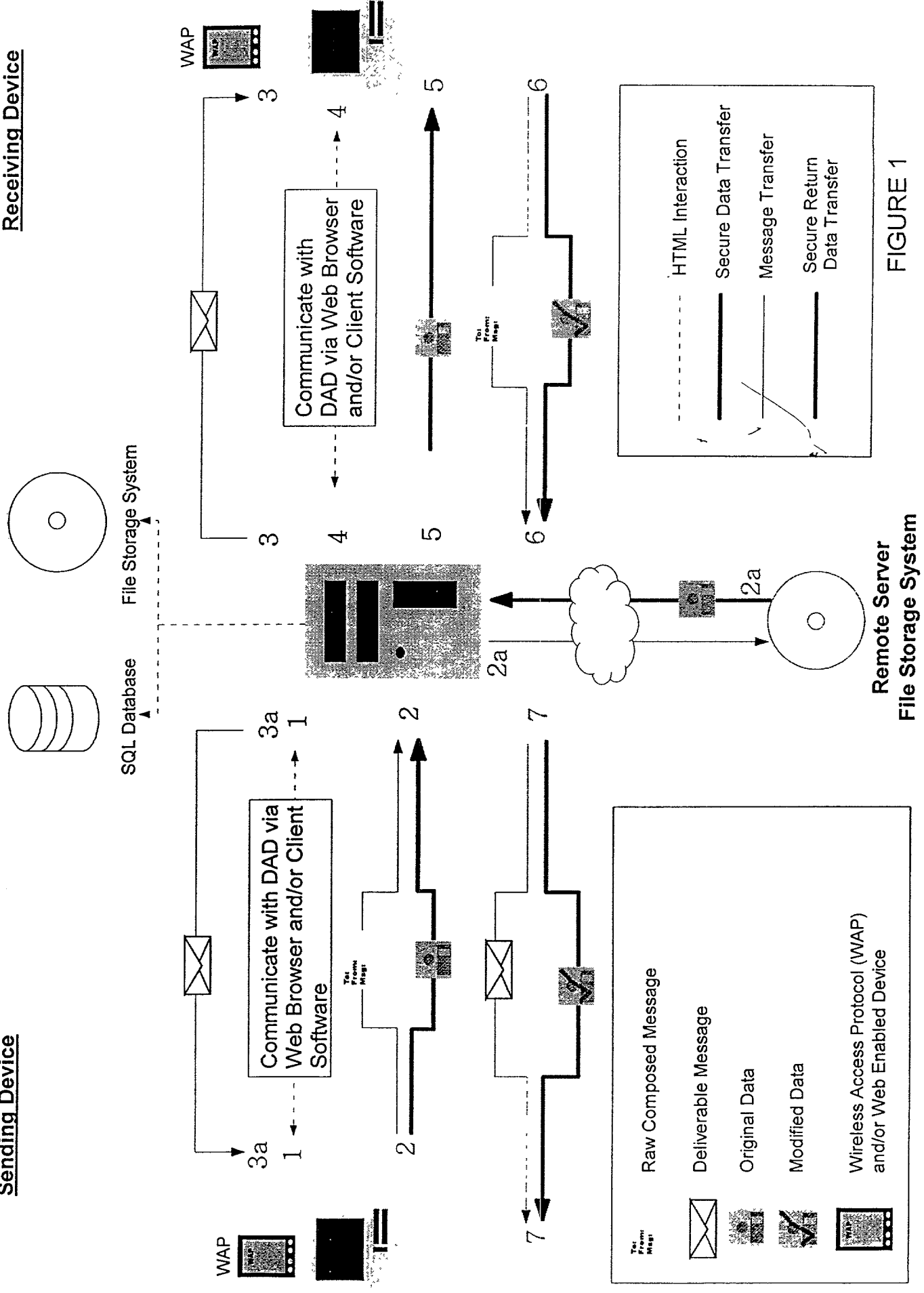


FIGURE 1

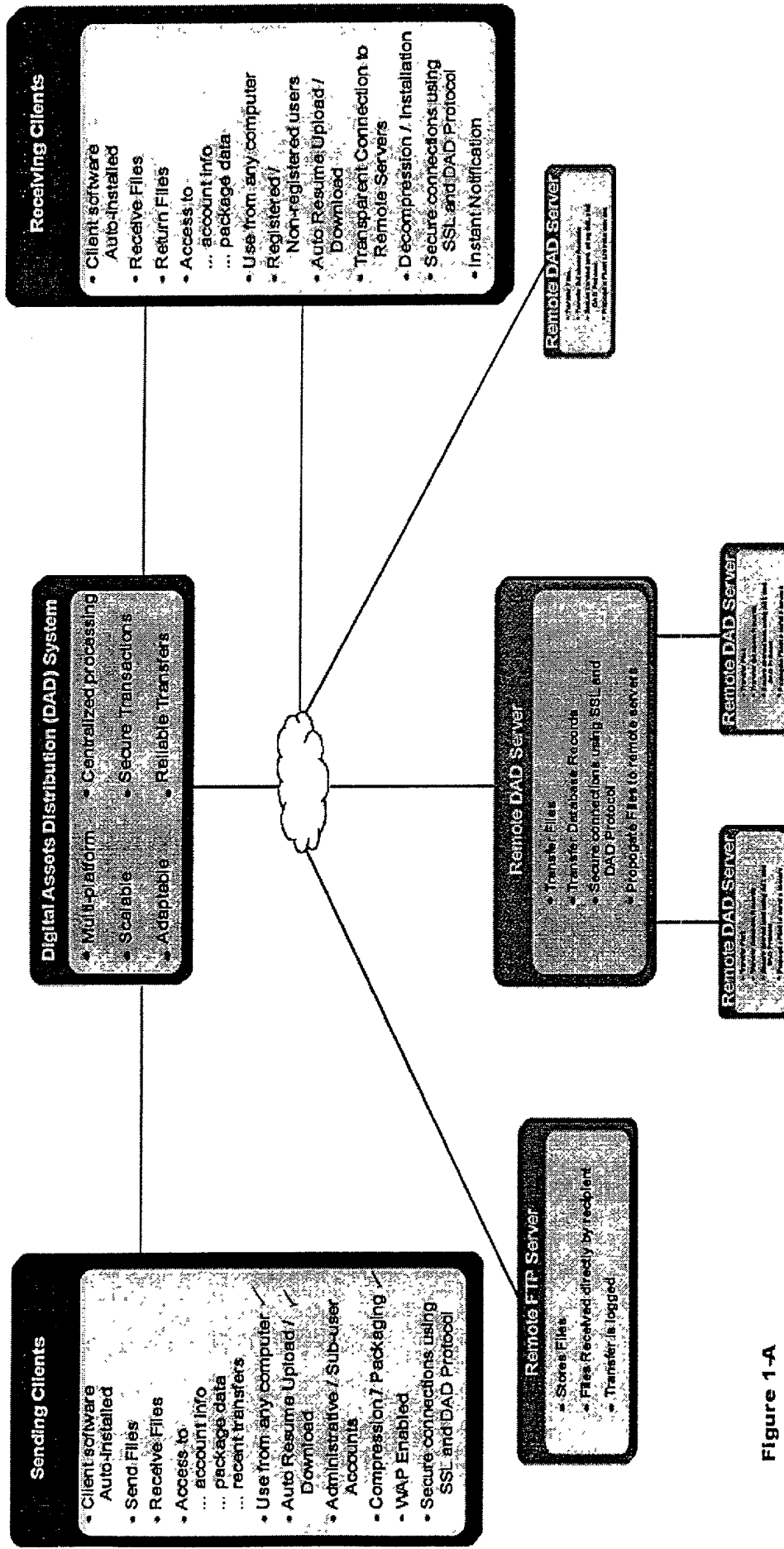


Figure 1-A

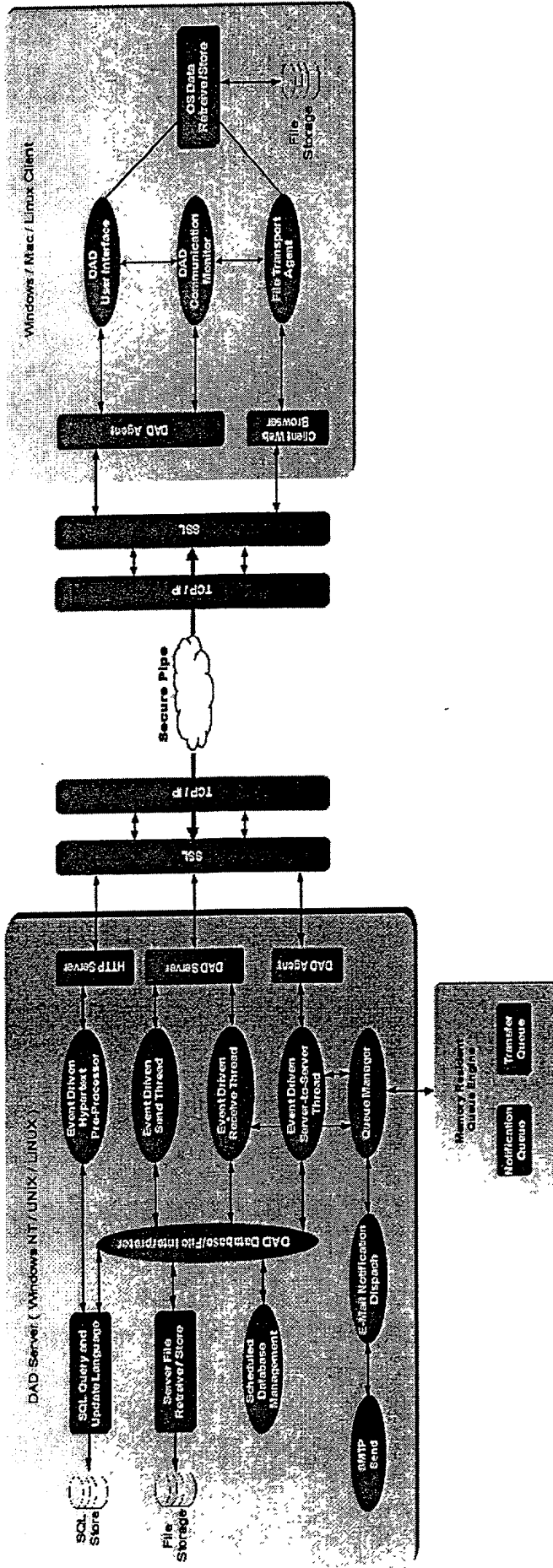


Figure 1-B

10

<u>ACCOUNT</u>	
UID (11)	
AID (12)	
LID (13)	
ACCOUNT NAME (14)	
PASSWORD (15)	
ACCOUNT TYPE (16)	
ACCOUNT LEVEL (16A)	
ADDRESS	
PHONE	
FAX	
EMAIL (17)	
CURRENT PID (18)	
EXPIRATION (19)	
LIMIT1 (19A)	
LIMIT2 (19B)	
ATTR1 (19C)	
ATTR2 (19D)	
USERLEVEL	
ADMINID	
TRACKING INFORMATION	
QUOTA SETTINGS	
BILLING INFORMATION	

20

<u>PACKAGE</u>	
PID (21)	
SENDER UID (22)	
RECIPIENT UID[] (22A)	
SID[] (23)	
DID[] (23A)	
STATUS	
FILENAME (24)	
CLIENT FILE LOCATION (25)	
XFR FILE PATHNAME (26)	
SENDER XFR FILE PATHNAME (26A)	
XFR FILESIZE (27)	
UPLOAD OFFSET (28)	
RETURN ENABLED (29)	
COMPRESSION OPTIONS (30)	
ENCRYPTION OPTIONS (31)	
ARCHIVING OPTIONS (32)	
PACKAGE TYPE (33)	
NOTIFY METHOD (34)	
NOTIFY INSTRUCTIONS (35)	
OTHER PID (36)	
INSTALLATION OPTIONS (37)	
PASSWORD (38)	
EXPIRATION (39)	
LIMIT1 (39A)	
LIMIT2 (39B)	
ATTR1 (39C)	
ATTR2 (39D)	
TRACKING INFORMATION	
ACCOUNTING INFORMATION	

40

<u>ADDRESS BOOK</u>	
AID	
UID[]	

70

<u>DOWNLOAD</u>	
DID (71)	
PID	
RECIPIENT UID	
EXPIRATION (72)	
LIMIT1 (72A)	
LIMIT2 (72B)	
ATTR1 (72C)	
ATTR2 (72D)	
TRACKING INFORMATION	

60

<u>SERVER LIST</u>	
LID	
SID[]	

50

<u>SERVER SITE</u>	
SID (51)	
SERVER NAME	
SERVER IP	
SERVER PORT	
FTPUSER	
FTP PASSWD	
FTP ACCOUNT	
FTP INIT	
DIRECTORY	
FTP FIREWALL	

UID - ACCOUNT ID
PID - PACKAGE ID
SID - SITE ID
AID - ADDRESS ID
LID - SERVER LIST
DID - DOWNLOAD ID

FIGURE 2

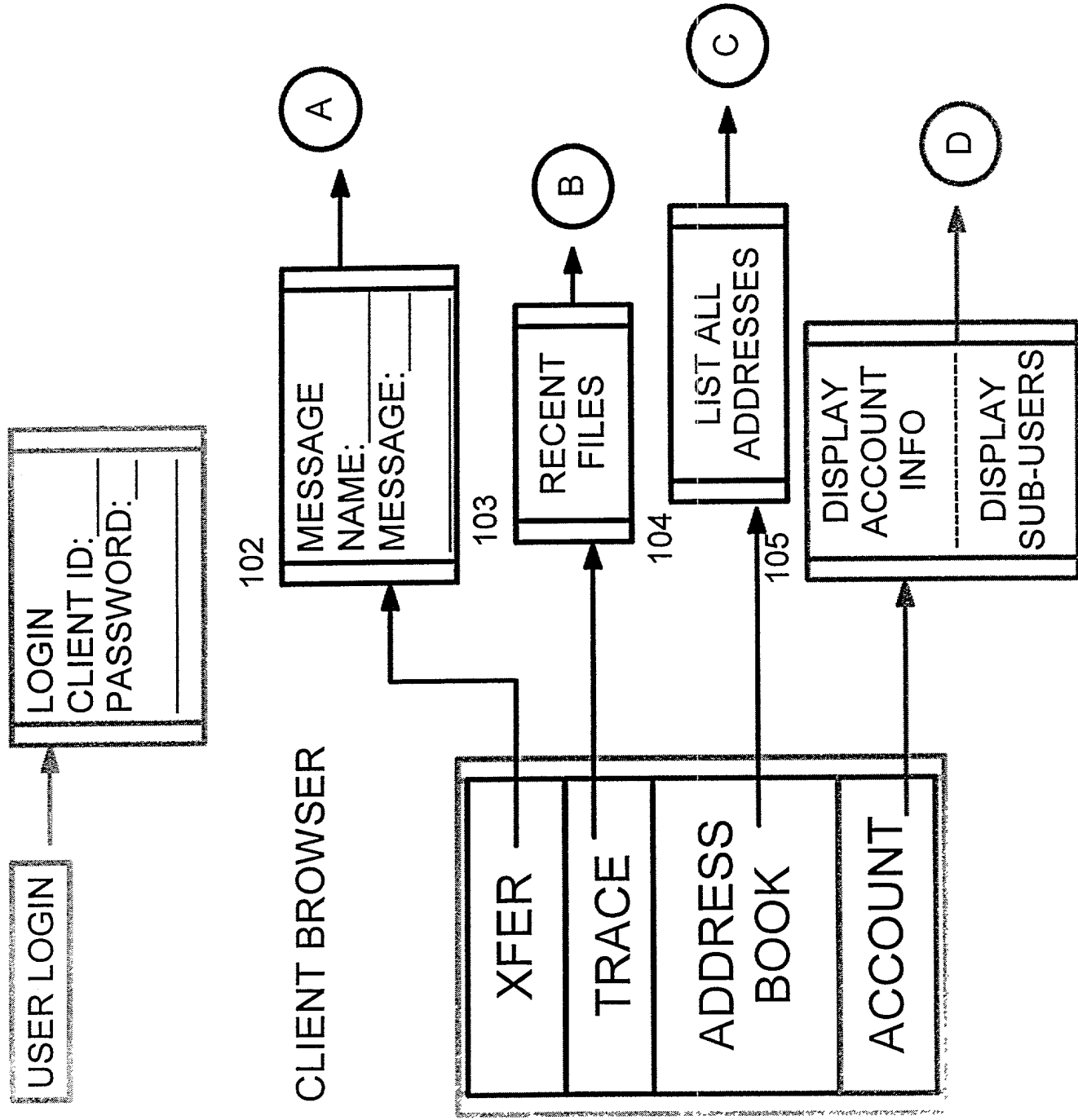


FIGURE 3

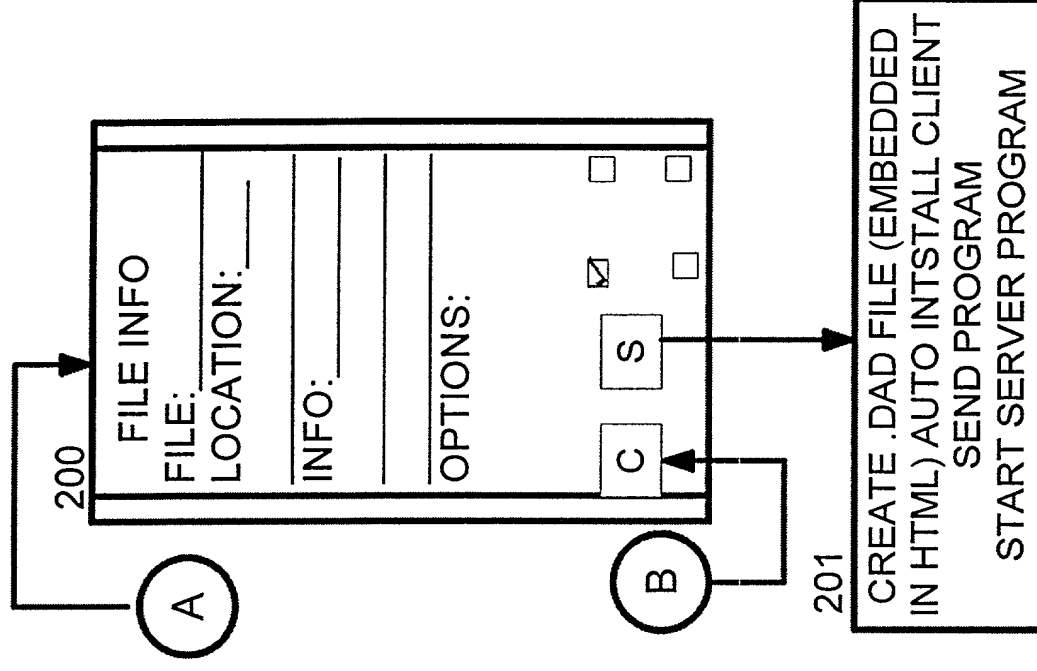


FIGURE 3-A

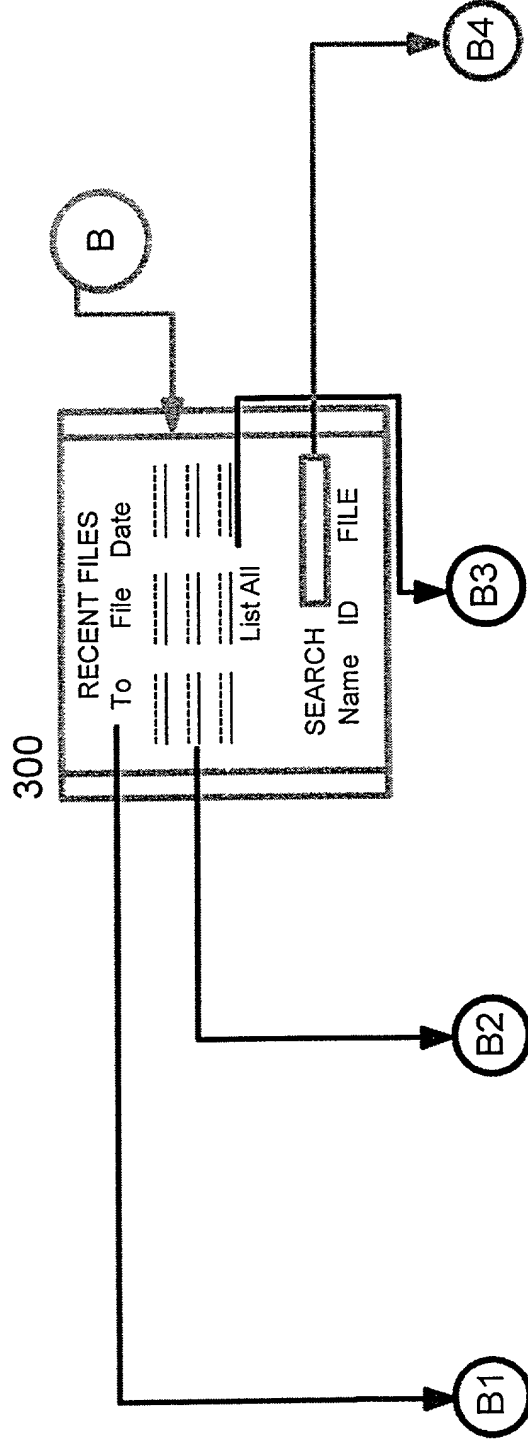


FIGURE 3-B

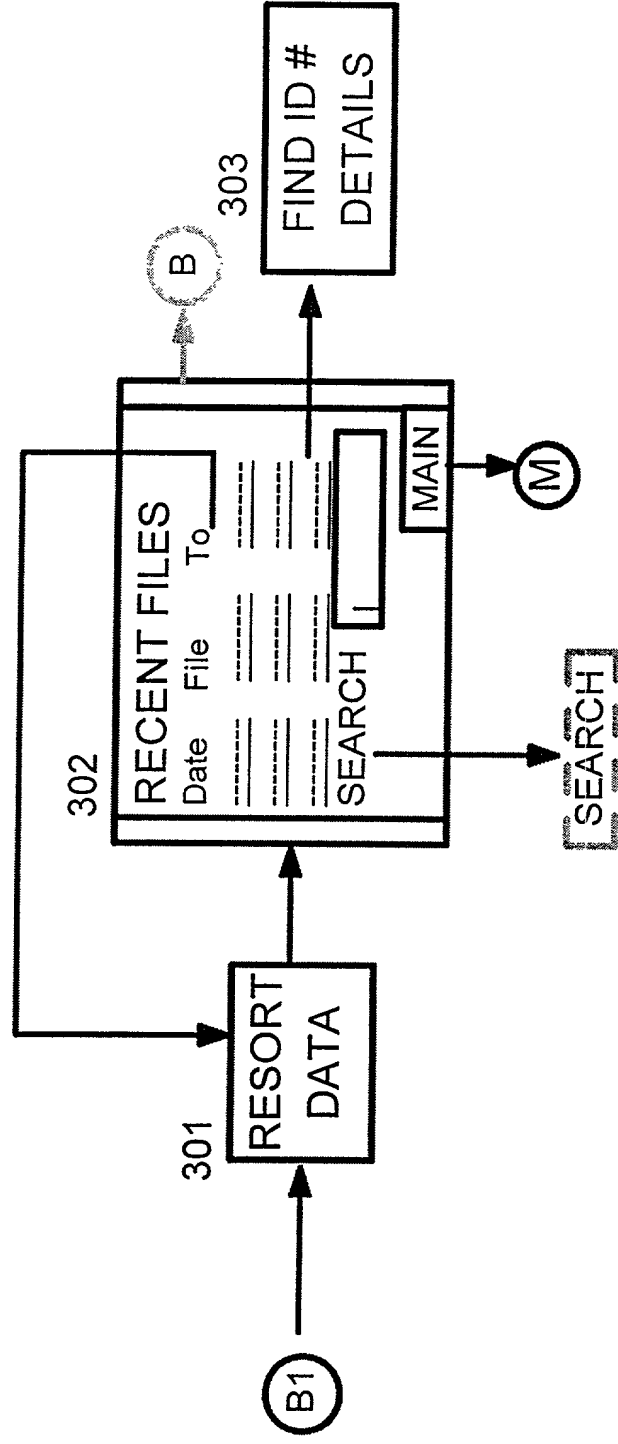


FIGURE 3-B-1

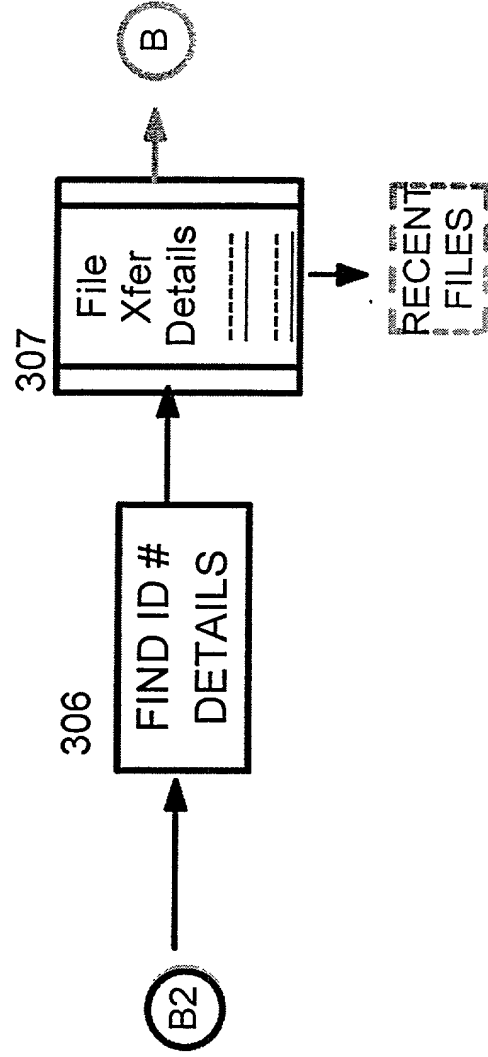


FIGURE 3-B-2

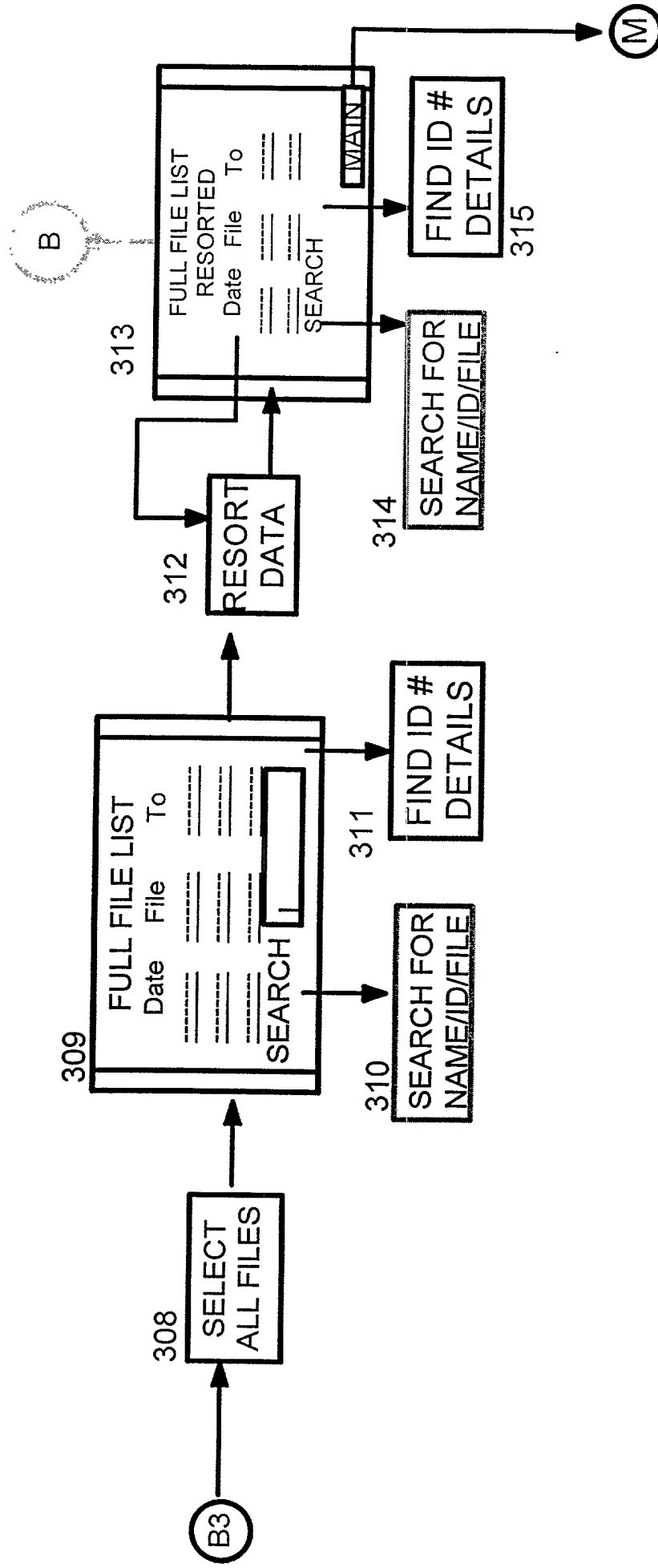


FIGURE 3-B-3

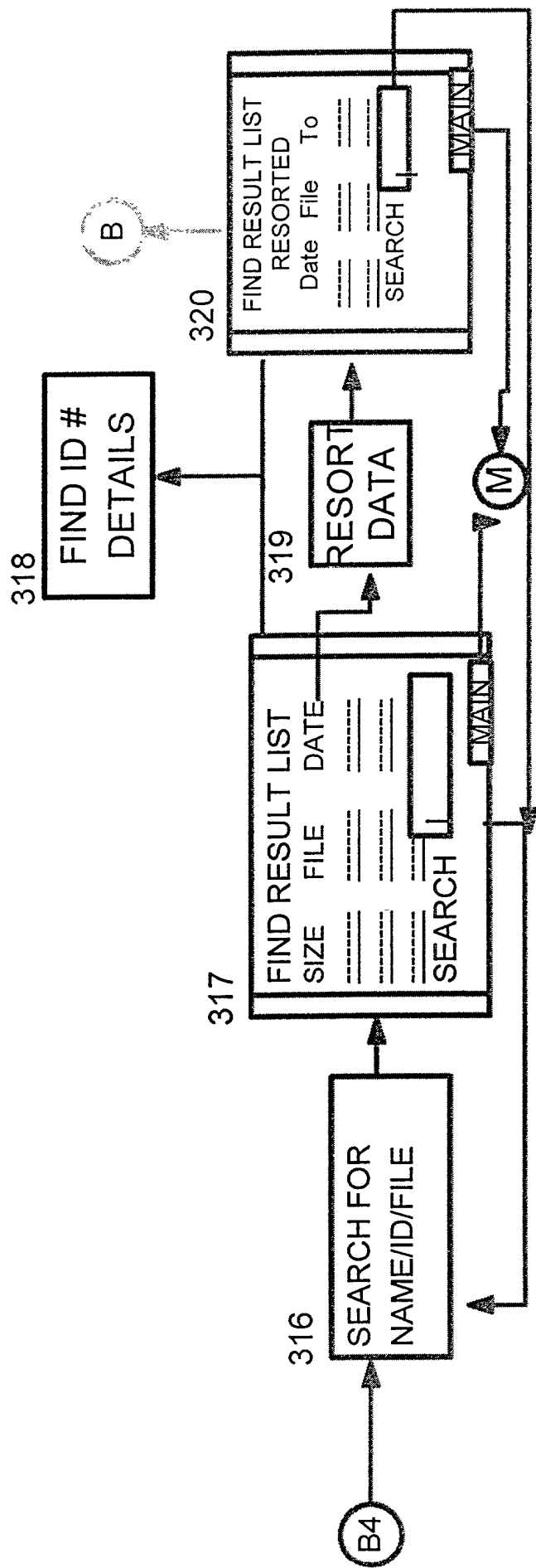


FIGURE 3-B-4

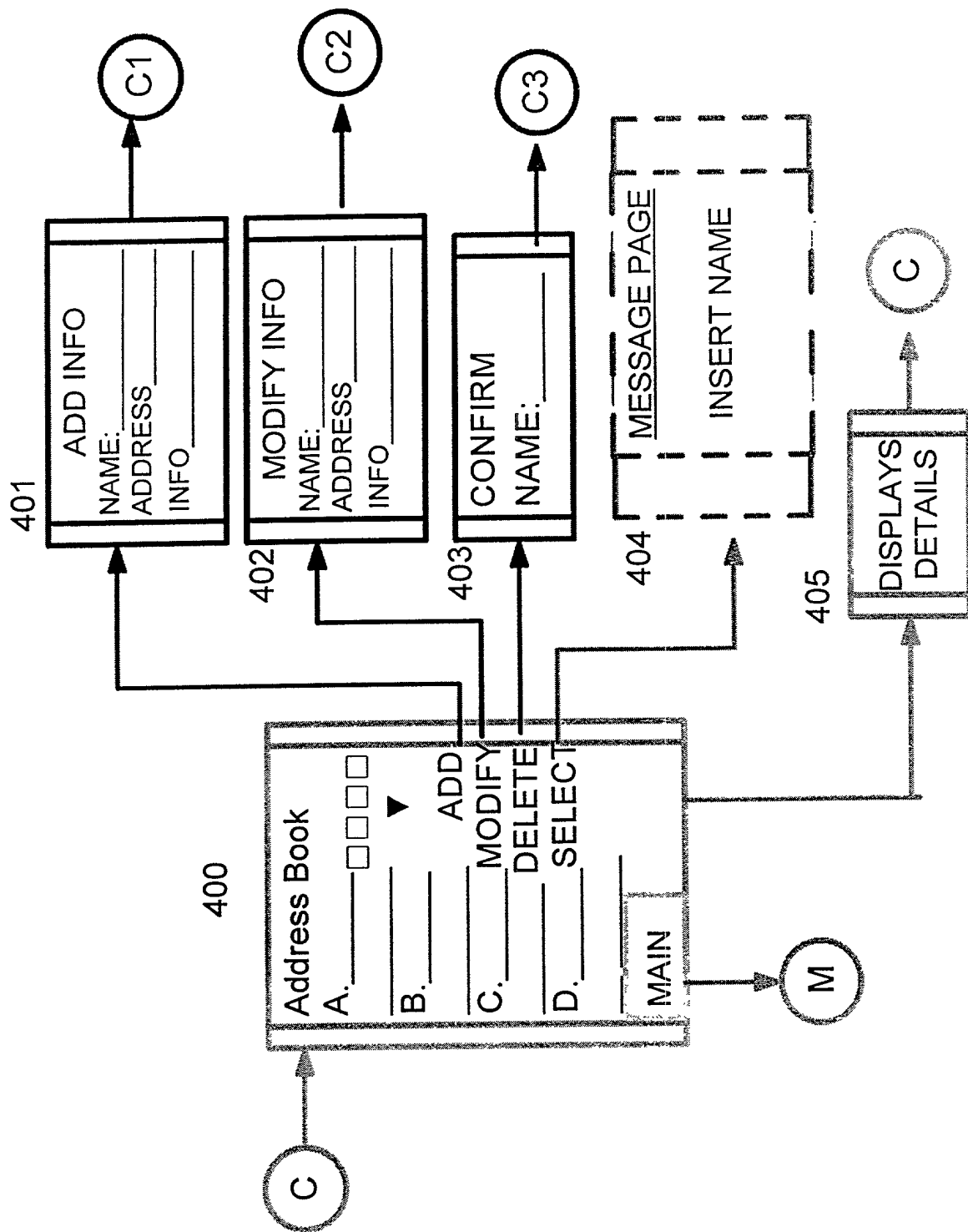


FIGURE 3-C

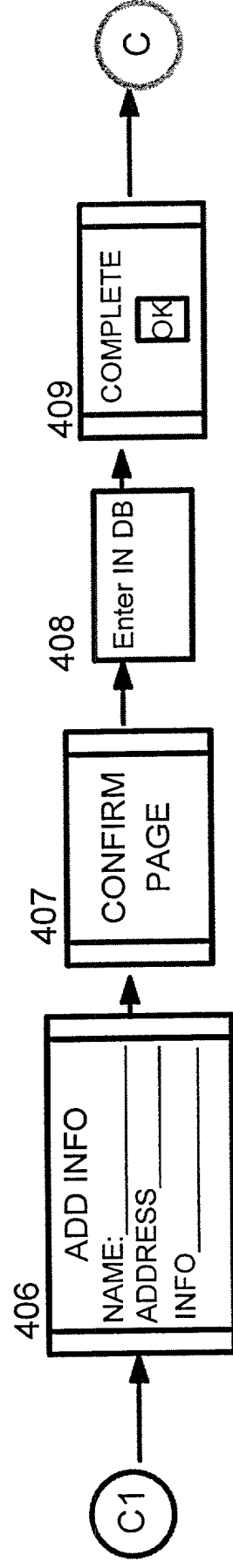


FIGURE 3-C-1

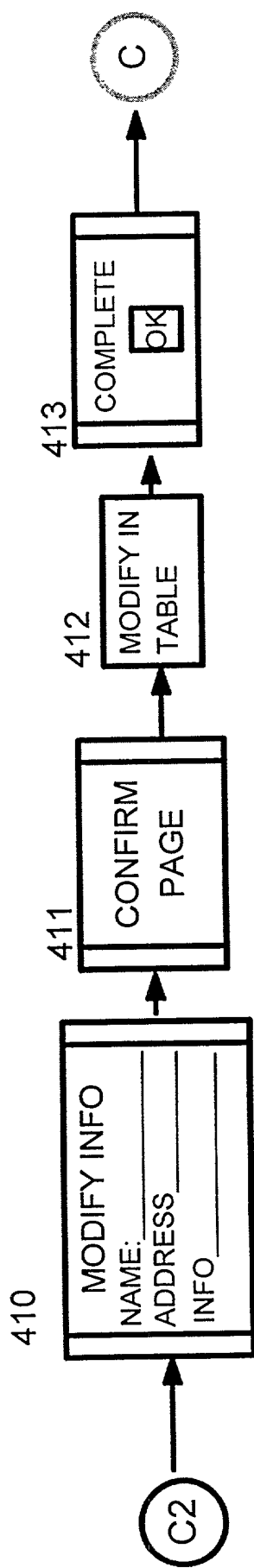


FIGURE 3-C-2

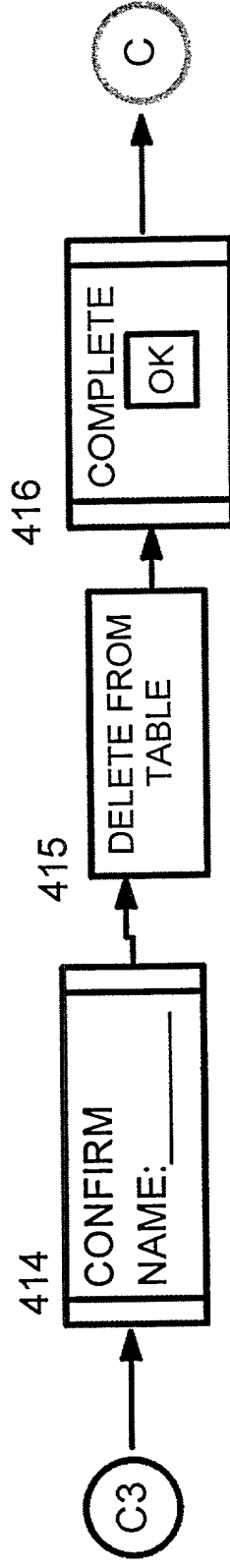
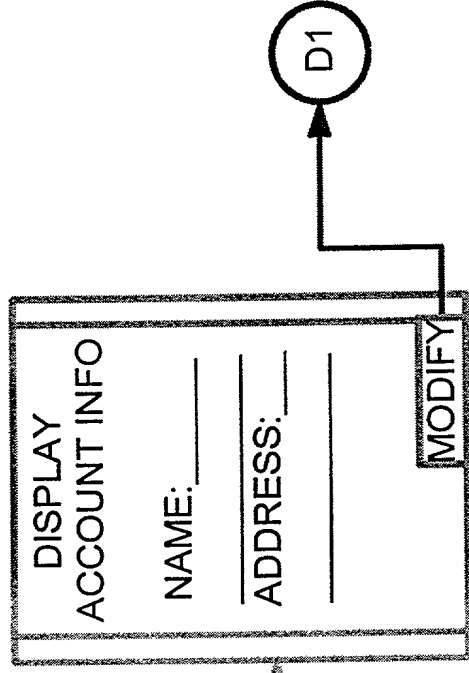


FIGURE 3-C-3

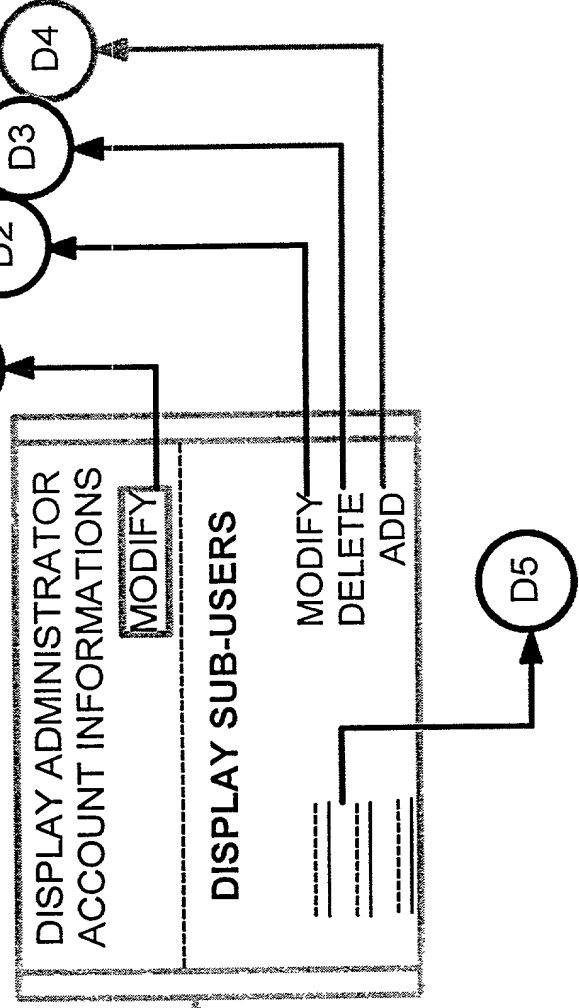
500



D1

D

501



D1

D2

D3

D4

D5

FIGURE 3-D

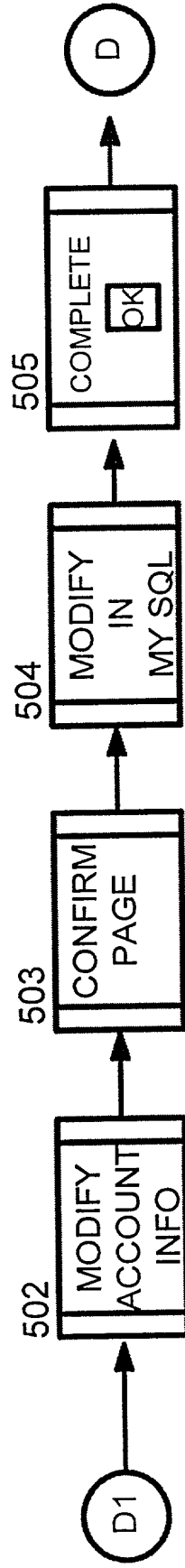


FIGURE 3-D-1

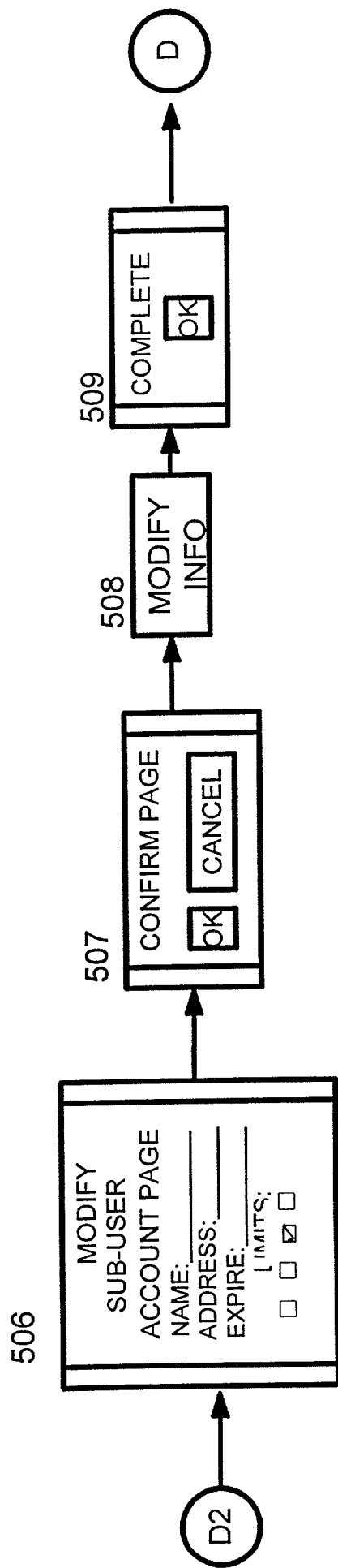


FIGURE 3-D-2

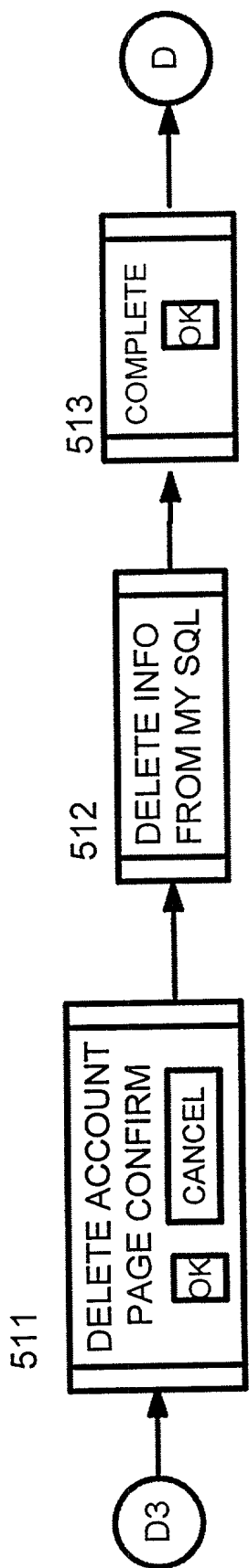


FIGURE 3-D-3

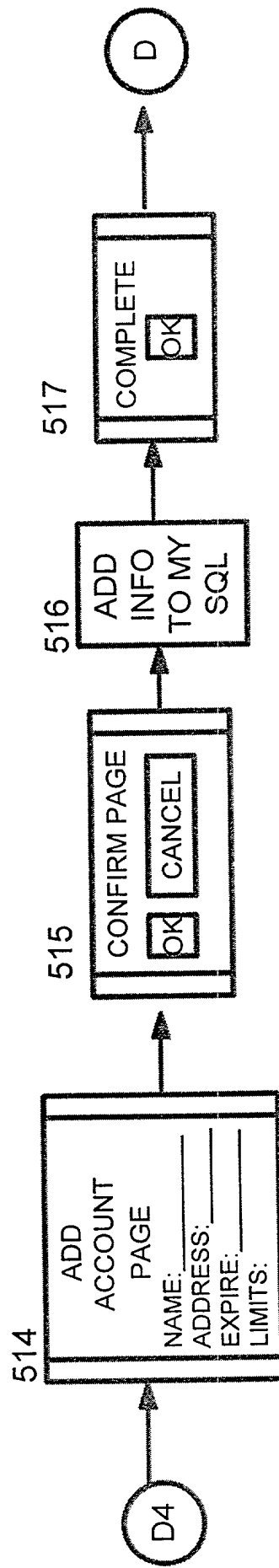


FIGURE 3-D-4

518

**SUB-USERS
ACCOUNT
DETAILS PAGE**

NAME: _____
ADDRESS: _____
EXPIRE: _____

LIMITS:
☐ ☐ ☒ ☐

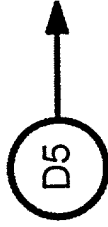


FIGURE 3-D-5

FIG. 4

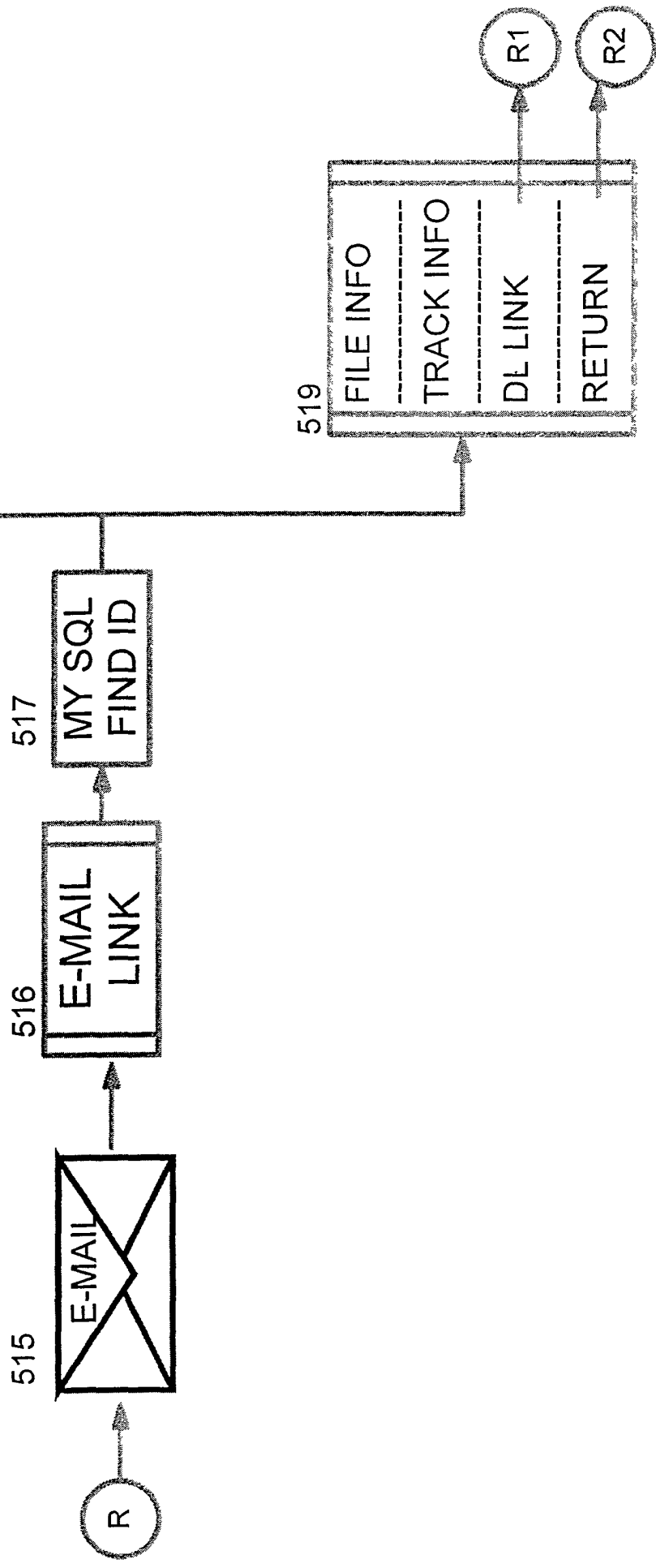


FIGURE 4

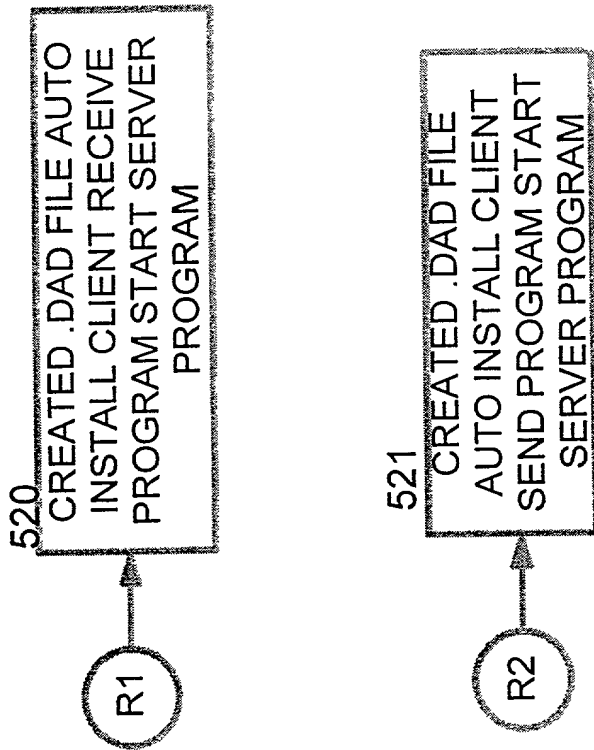


FIGURE 4-1

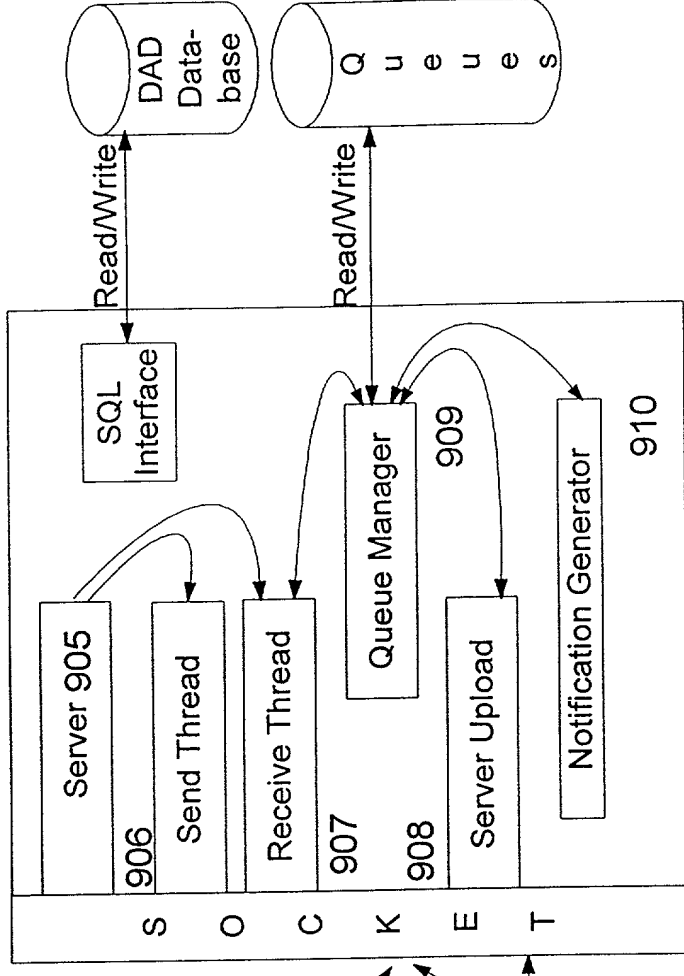
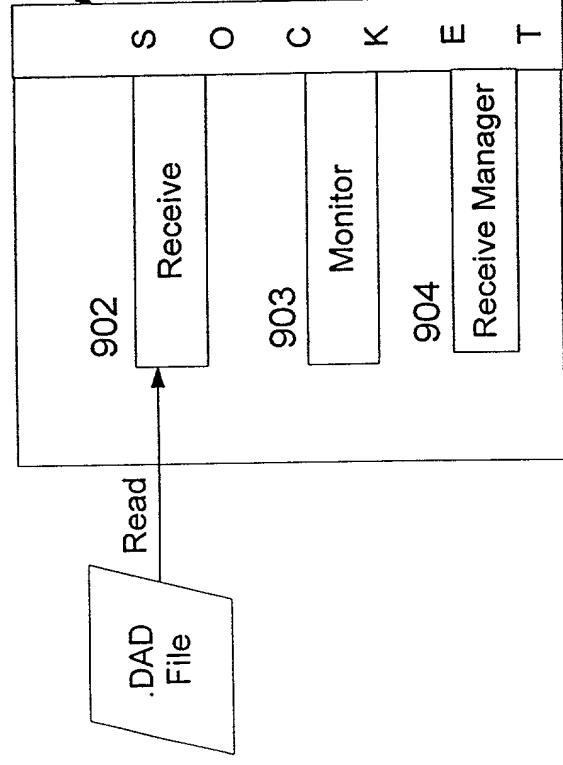
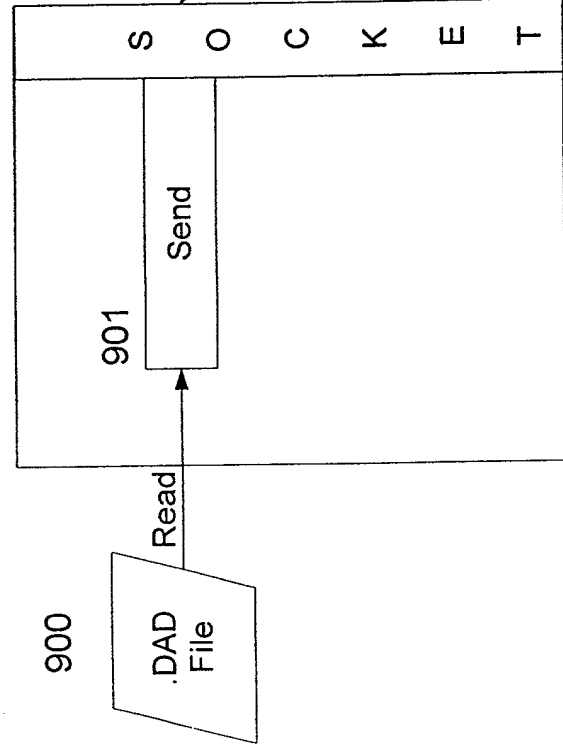
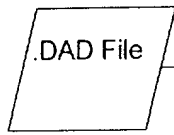


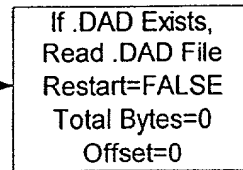
FIGURE 5

Client Send

1000



1001

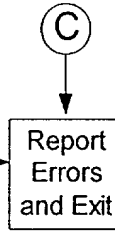


1002

Failure?

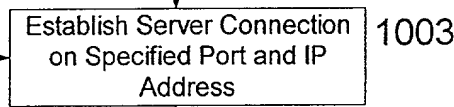
Y

1004



(C)

(E)



1003

1005

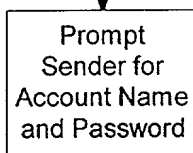


Y

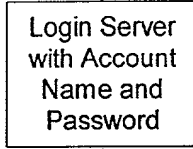
(H)

N

1006



1006A



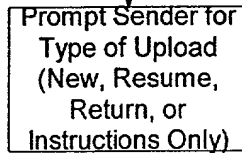
1006B

Failure

Y

N

1006C



1006D

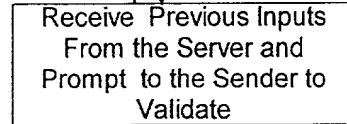
Resume?

N

(A)

Y

1006E



Failure

Y

N

(H)

- File Pathname on Local Machine
- Server Port and IP Address
- PID
- Options (Sustain Folder Structure, Relative Path, Compression Flag, Encryption Flag)
- Local XFR File Pathname (Optional)
- File Size (Optional)
- Restart Offset (Optional)

Downloaded by [illegible]

FIGURE 6


```

graph TD
    B((B)) --> 1017[Receive Restart Offset]
    1017 --> 1019{Restart Offset=Total Bytes?}
    1019 -- Y --> G((G))
    1019 -- N --> 1020{Restart Offset>Total Bytes?}
    1020 -- Y --> C((C))
    1020 -- N --> 1021[Offset=Restart Offset]
    1021 --> 1022[Send XFR File Name, Total Bytes, Offset to Server]
    F((F)) --> 1022
    1022 --> 1024[Receive Response]
    1024 --> 1025{Positive Response?}
    1025 -- N --> C((C))
    1025 -- Y --> 1026[Start Progress Bar with Cancel Button]
    1026 --> 1027[Send XFR File Starting with Offset with Socket]
    1027 --> 1030{Failure?}
    1030 -- Y --> 1029{Time Out?}
    1029 --> 1031{>Retry Limit?}
    1031 -- N --> 1034[Set Restart]
    1034 --> E((E))
    1031 -- Y --> 1032[Update Offset With Progress Indicator]
    1032 --> 1033{More Data?}
    1033 -- Y --> 1032
    1033 -- N --> 1028{Cancel?}
    1028 -- Y --> C((C))
    1028 -- N --> 1027
    1033 --> D((D))

```

1

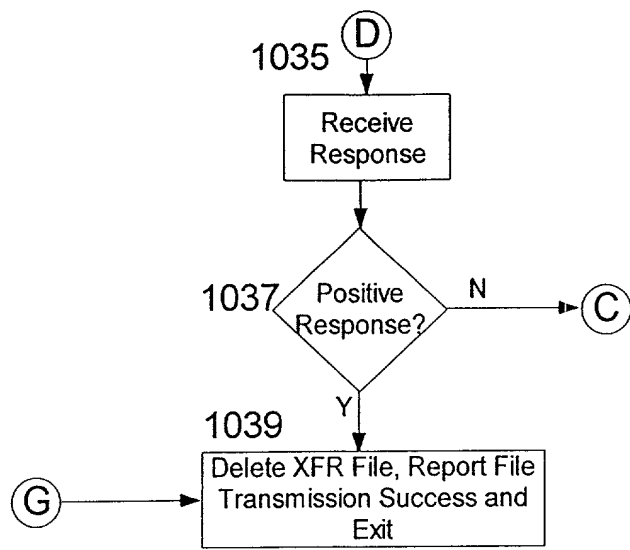


FIGURE 6-3

Client Receive

- Server Port and IP Address
- PID
- Options (Sustain Folder Structure, Relative Path, Compression Flag, Encryption Flag, and Installation)
- XFR File Pathname
- File Size
- Type of Protocol (DAD or FTP)
- FTP Protocol (User Name, Password, Account, Initial Directory and Firewall)
- Primary Server Port and IP Address

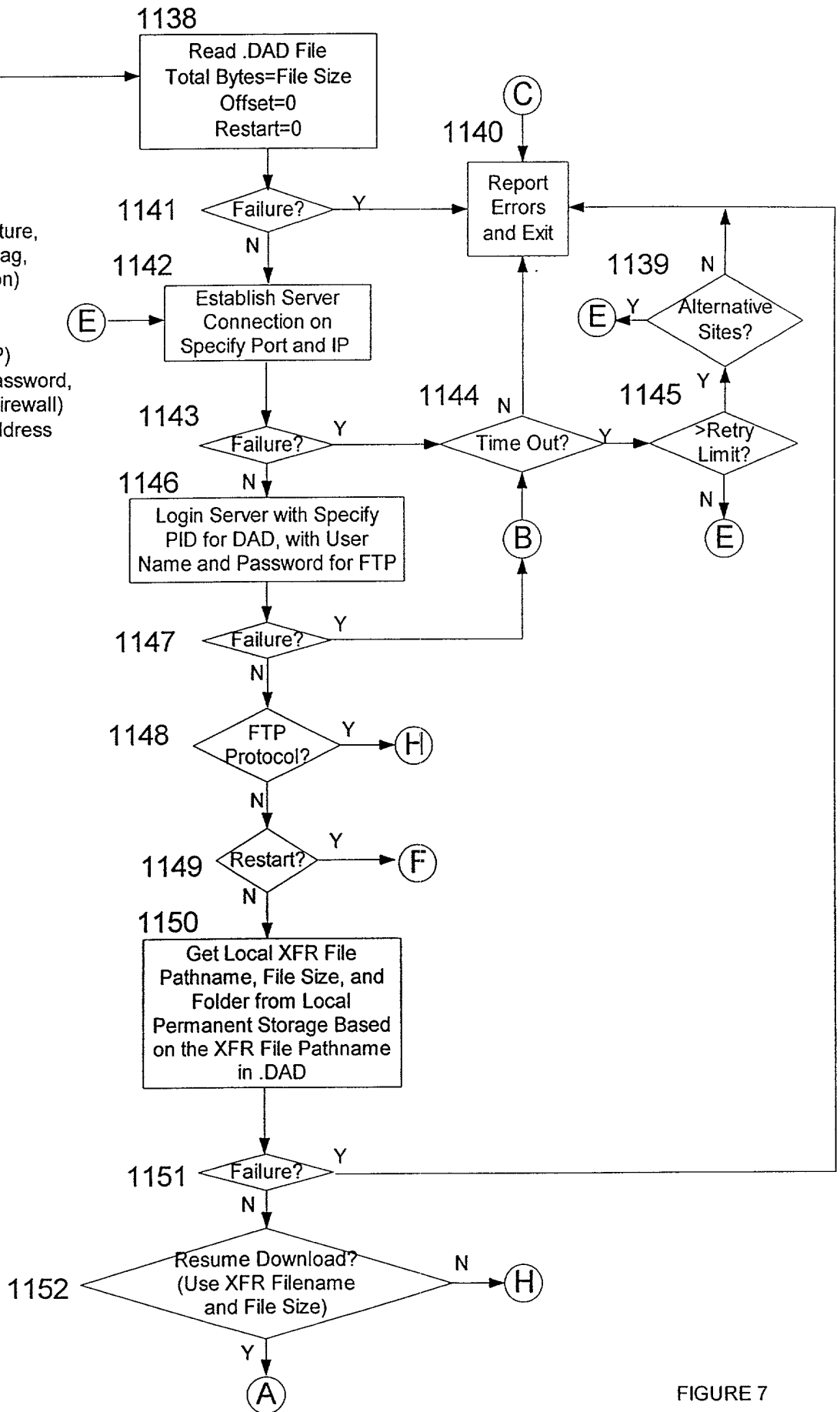


FIGURE 7

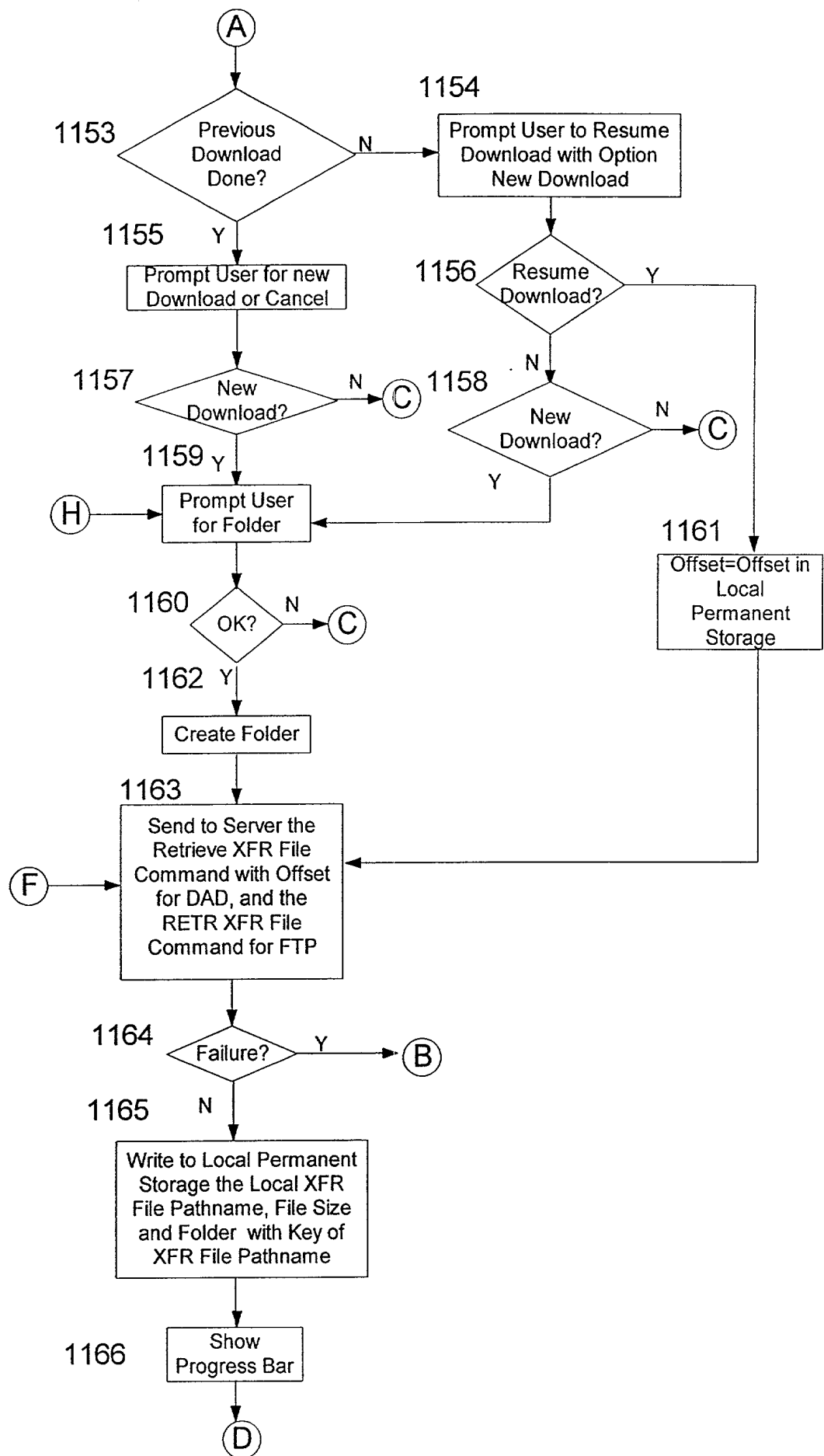


FIGURE 7-1

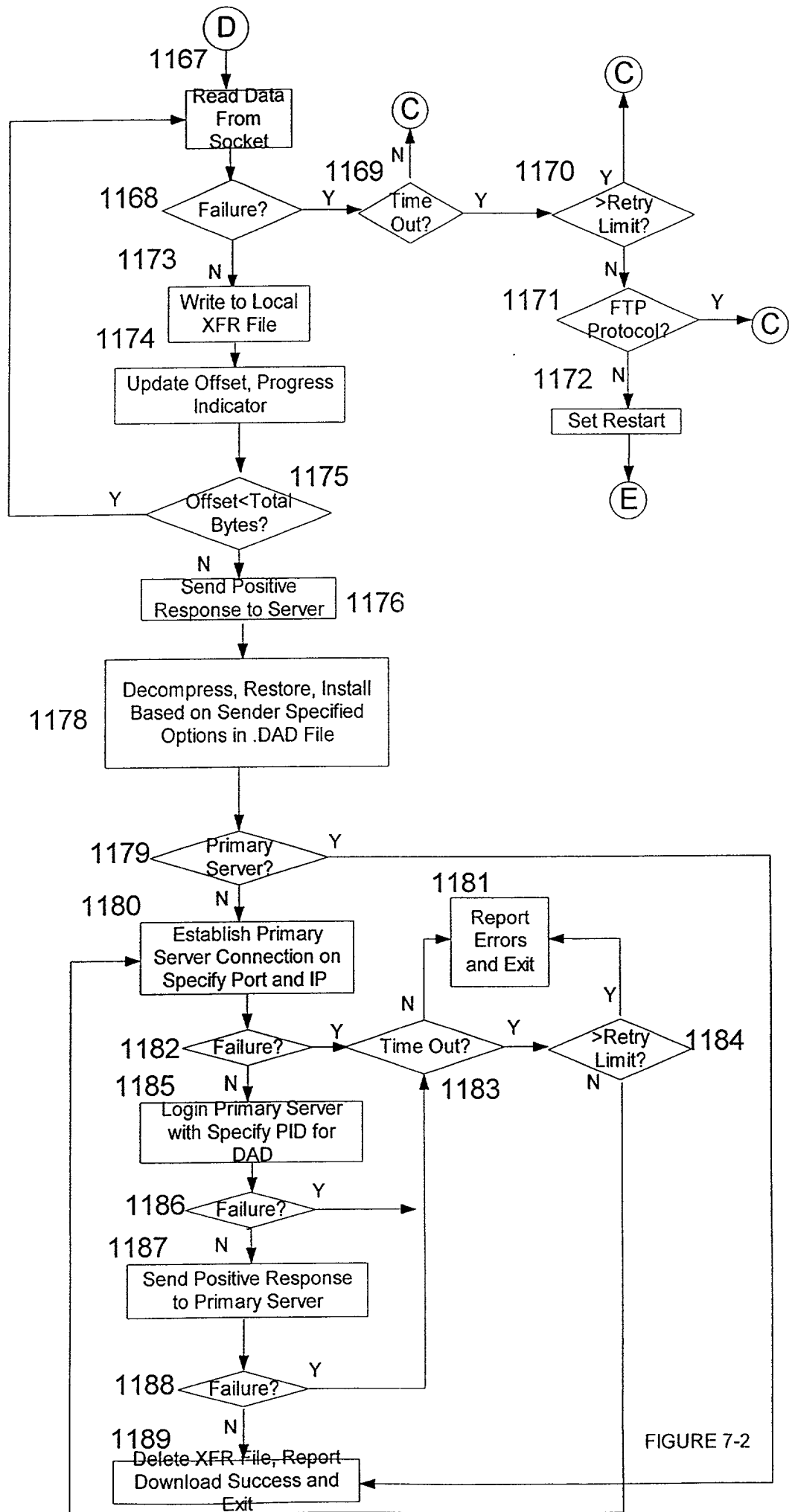


FIGURE 7-2

Server

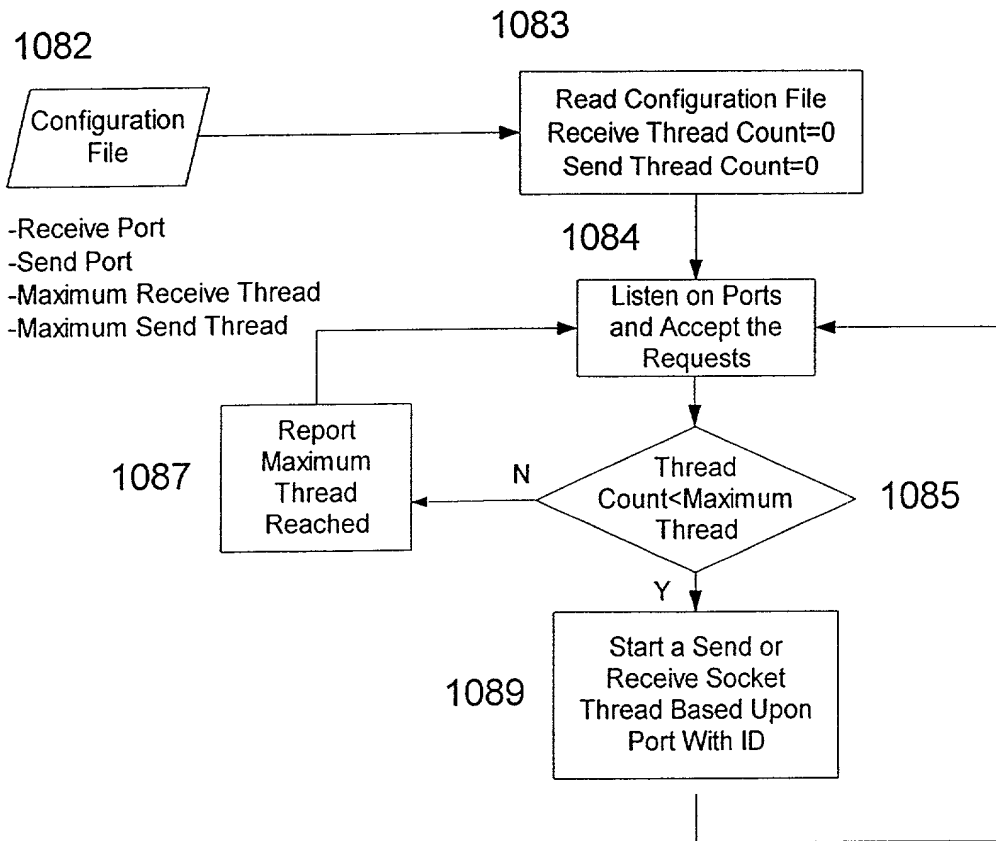


FIGURE 8

Server Receive Thread

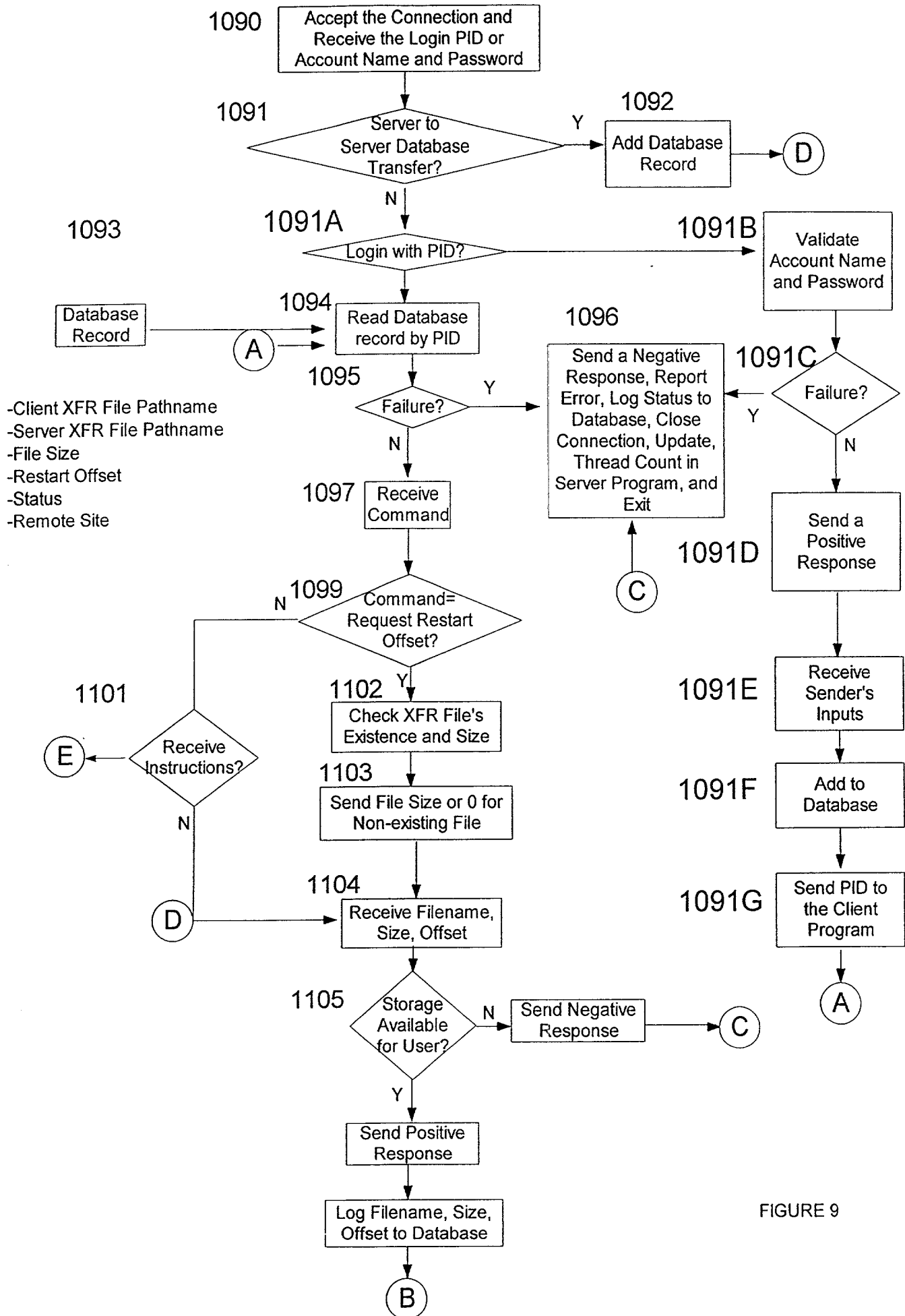


FIGURE 9

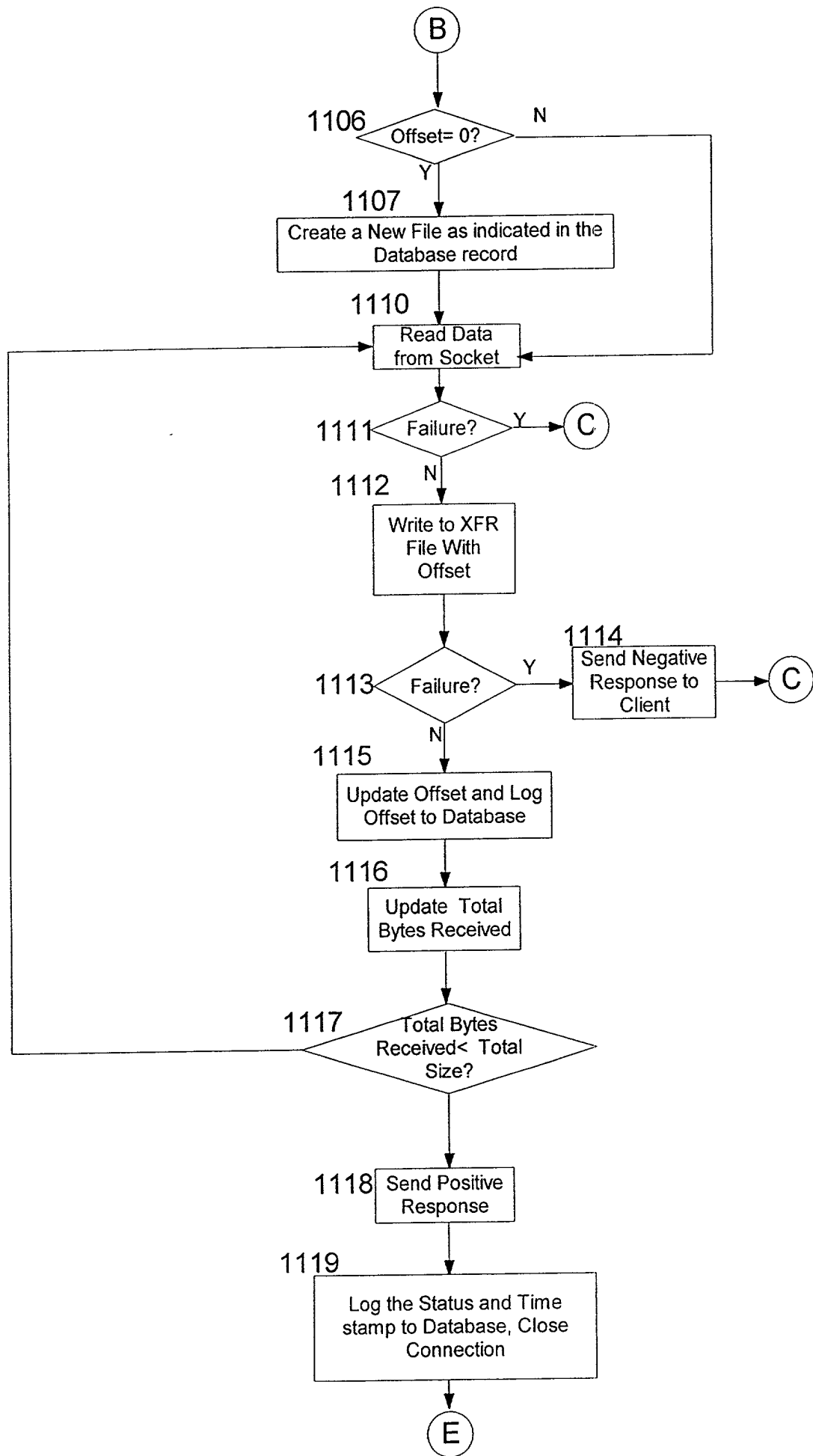


FIGURE 9 -1

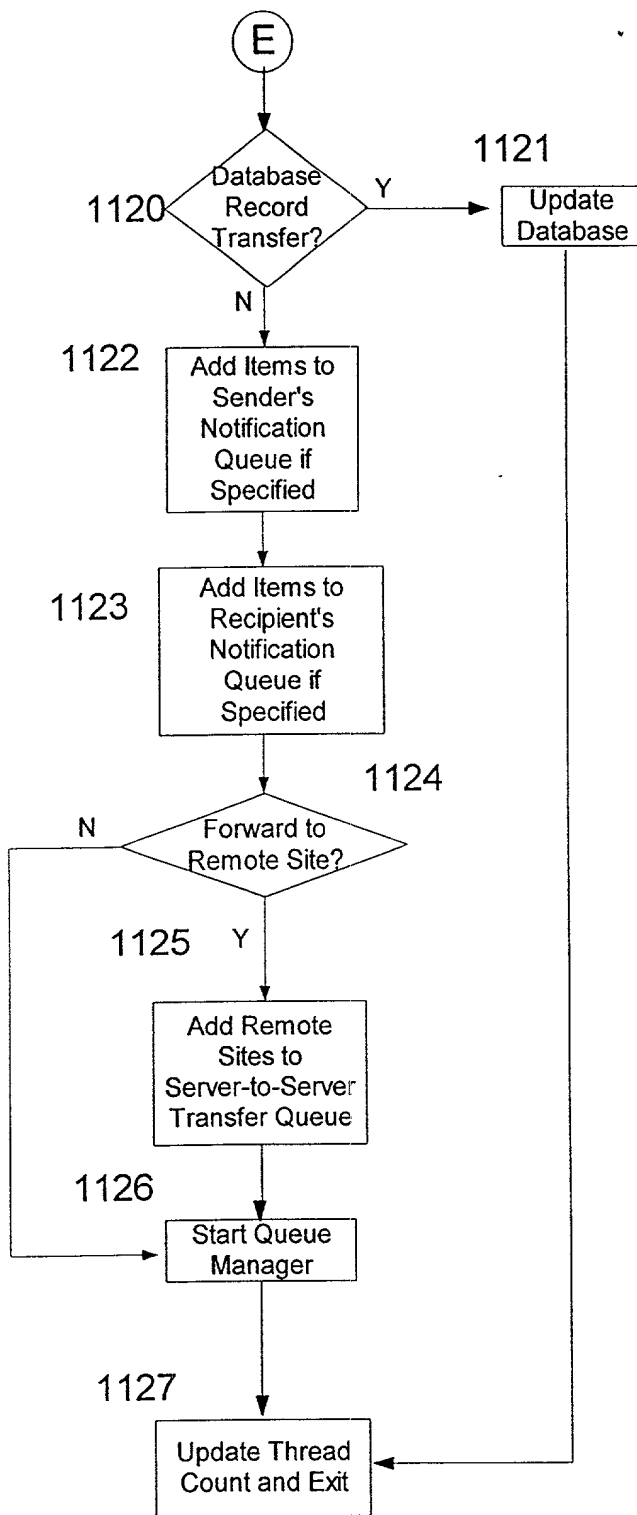


FIGURE 9-2

Server Send Thread

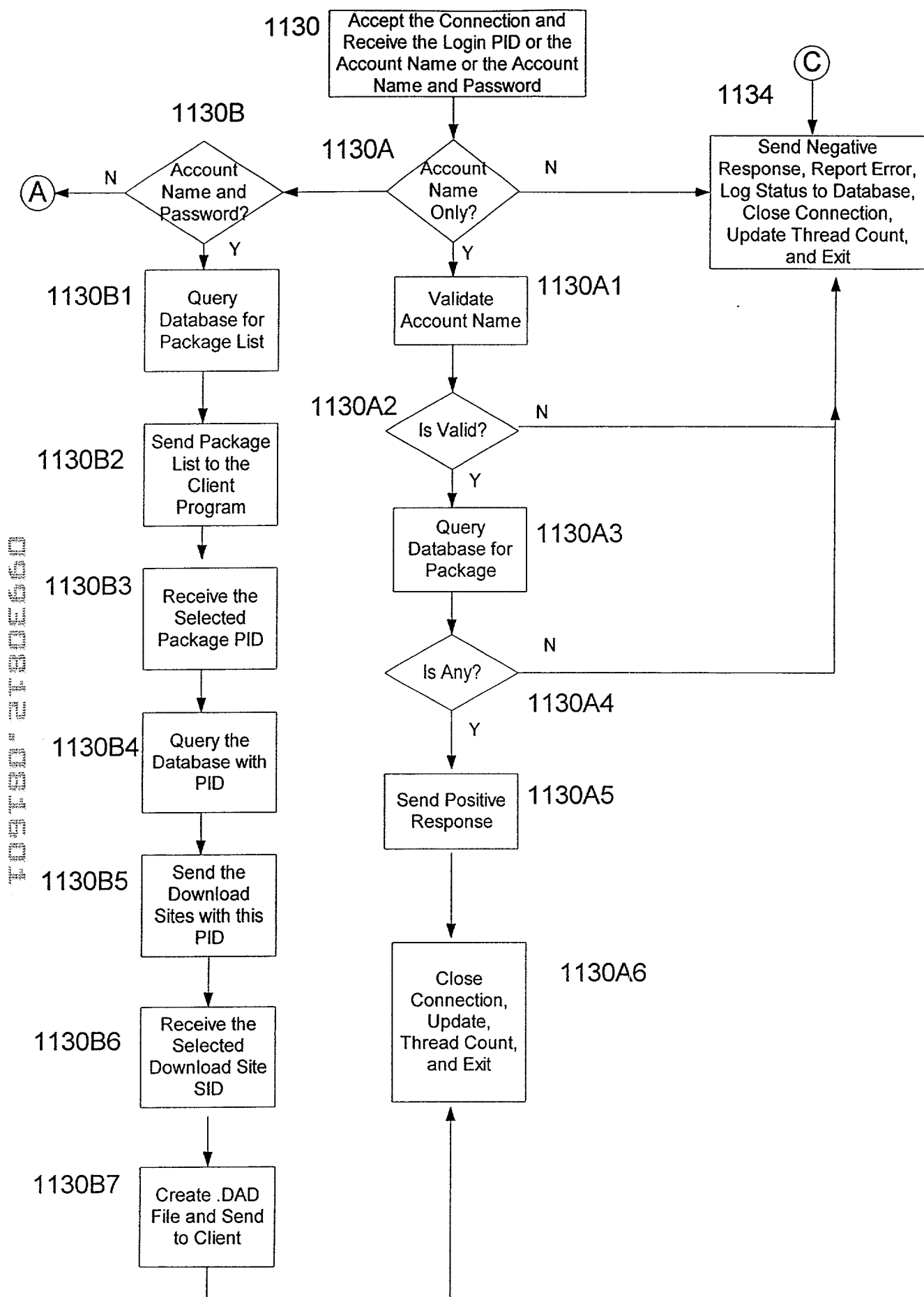


FIGURE 10

```

graph TD
    A((A)) --> 1131[Database Record]
    1131 --> 1132[Read Database record by PID Total Bytes= File Size]
    1132 -- Y --> 1133{Failure?}
    1133 -- C --> C((C))
    1133 -- N --> 1135[Receive XFR File Pathname, Offset From Client]
    1135 --> 1136{Failure?}
    1136 -- C --> C
    1136 -- N --> 1137[Read XFR File]
    1137 --> 1138[Send Data Starting Offset to Socket]
    1138 --> 1139{Failure?}
    1139 -- C --> C
    1139 -- N --> 1140[Update Offset]
    1140 --> 1141{Offset<Total Bytes?}
    1141 -- Y --> 1138
    1141 -- N --> 1142[Receive Response]
    1142 --> 1144{Failure?}
    1144 -- C --> C
    1144 -- N --> 1145{Positive?}
    1145 -- C --> C
    1145 -- Y --> 1146[Update Database, Close Connection, Update Thread Count, and Exit]

```

FIGURE 10-1

Server to Server Upload

- Server Port and IP Address
- ID
- Type of Protocol (DAD or FTP)
- Options (Sustain Folder Structure, Relative Path, Compression Flag, Encryption Flag)
- XFR File Pathname (Optional)
- File Size (Optional)
- Restart Offset (Optional)
- FTP Protocol (User Name, Password, Account, Initial Directory and Firewall)
- Server-to-Server Transfer Queue

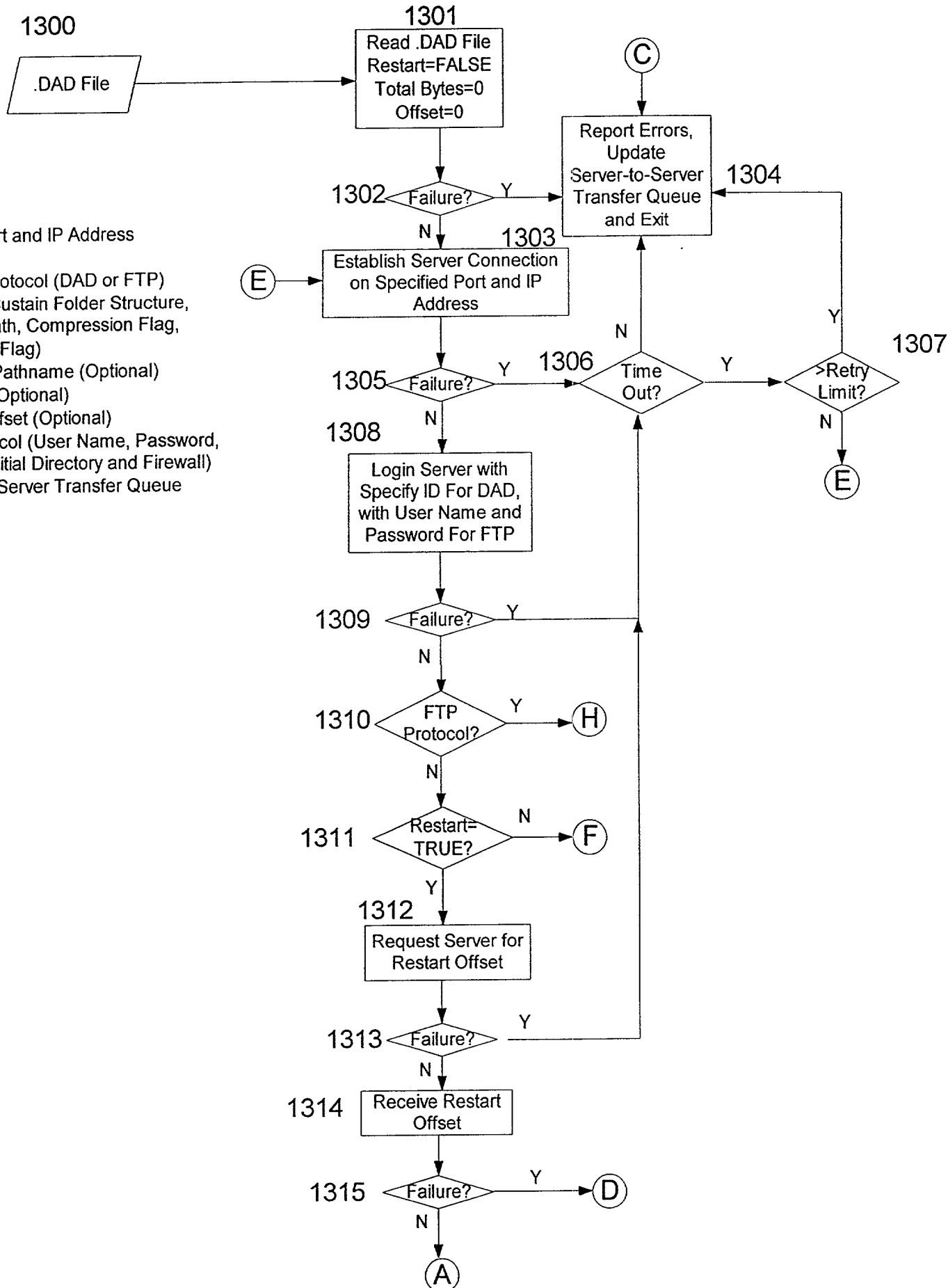


FIGURE 11

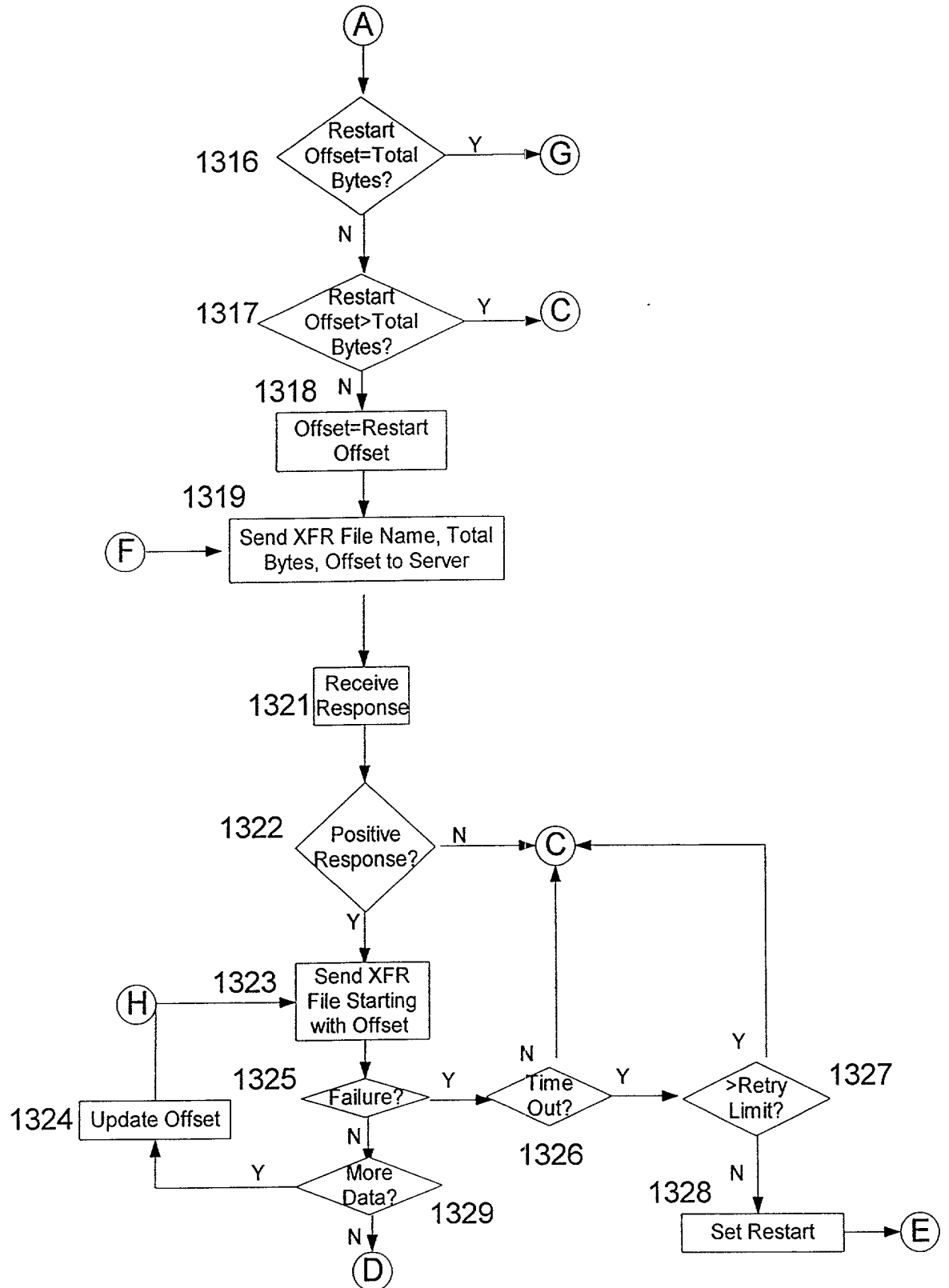


FIGURE 11.1

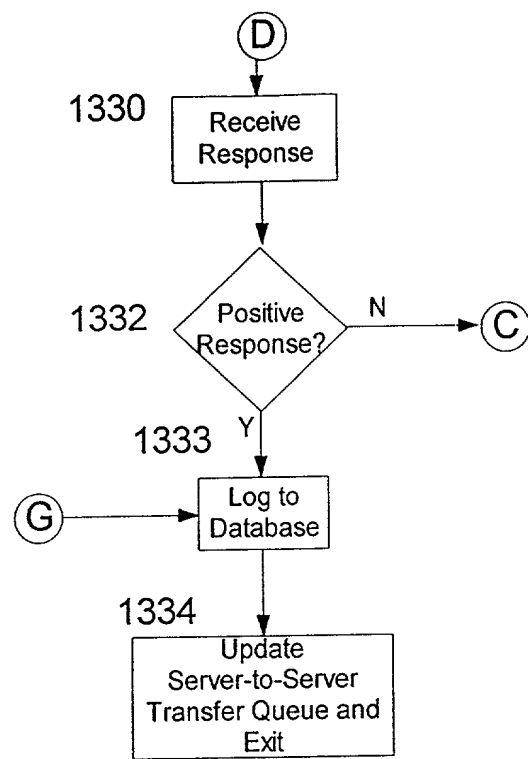


FIGURE11.2

Client Monitor

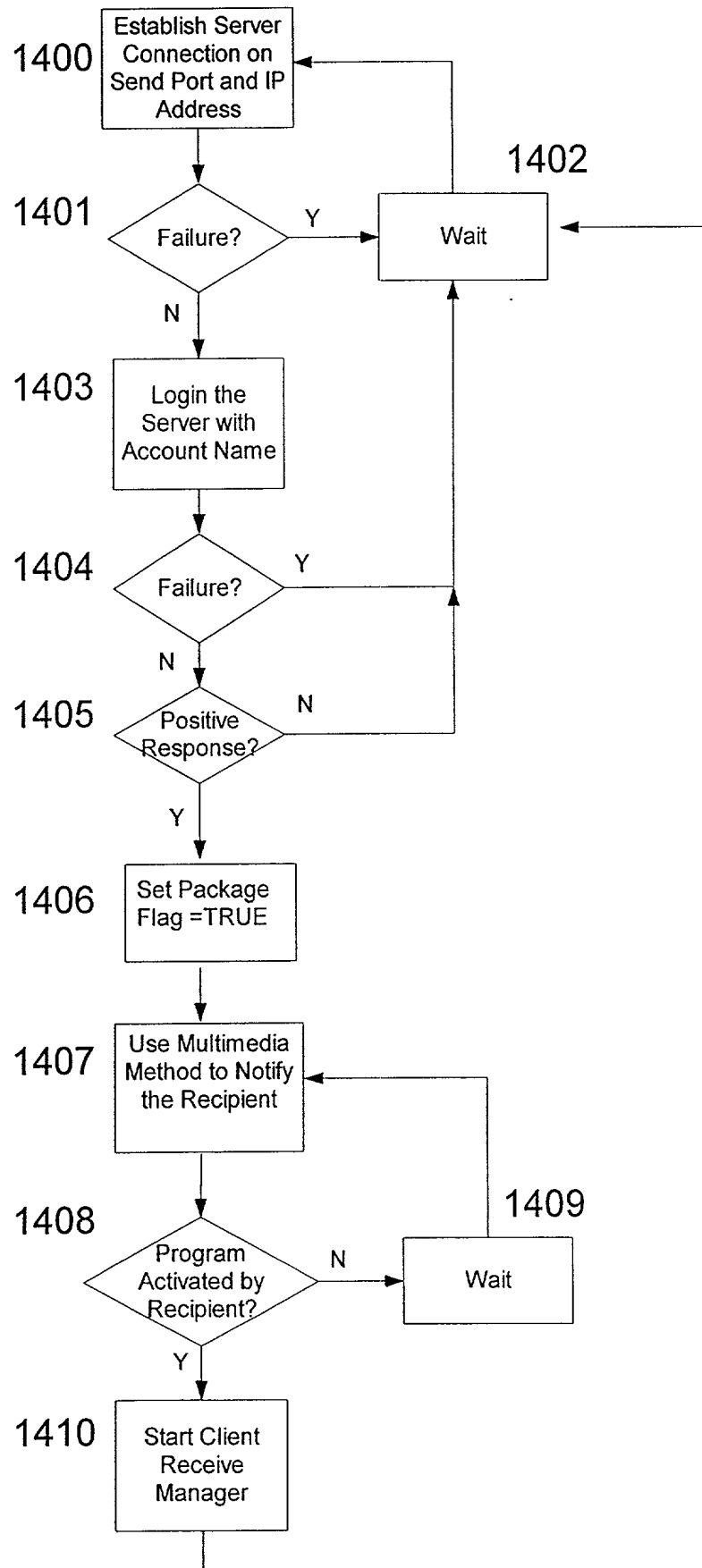


FIGURE 12

Client Receive Manager

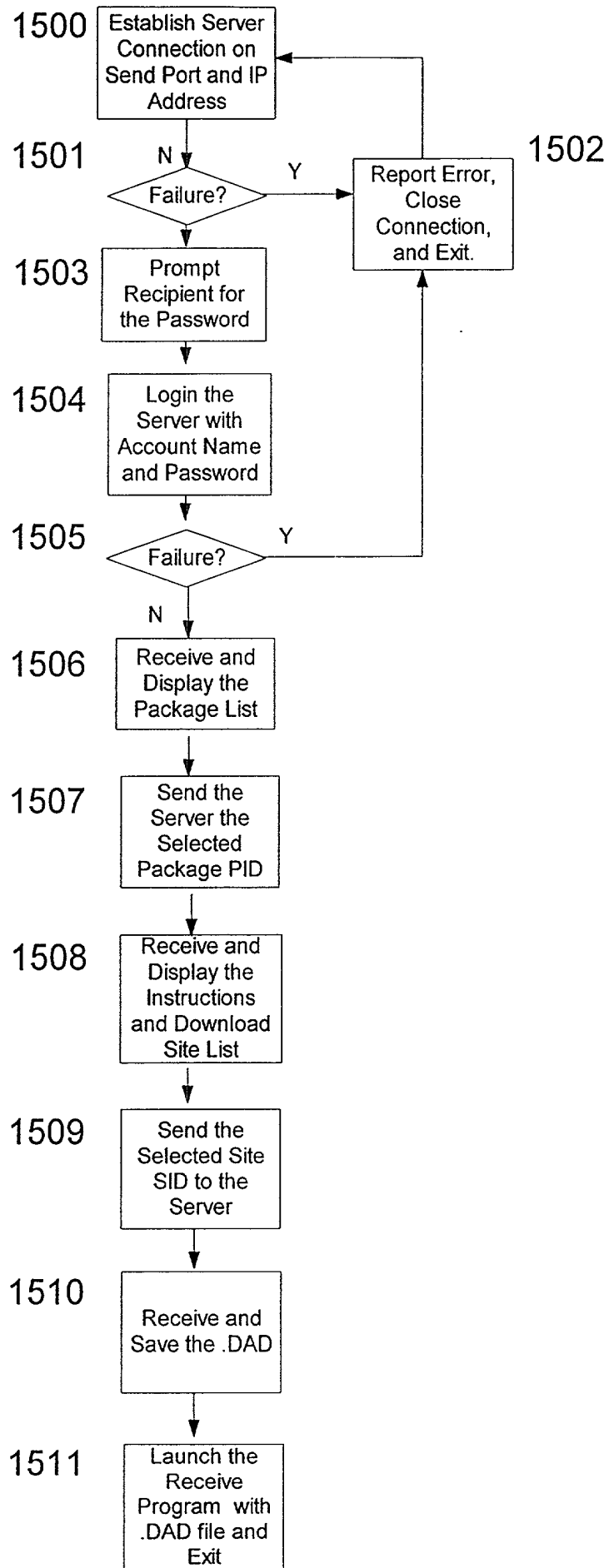


FIGURE 13